

S
618.92
H2miami
1992

MONTANA STATE LIBRARY

S 618.92 H2miami 1992 c.1
Montana's initiative for the abatement of



3 0864 00084791 6

COLLECTION

AUG 4 1993

MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

**MONTANA'S INITIATIVE
FOR THE ABATEMENT OF
MORTALITY IN INFANTS**

PLEASE RETURN

**MIAMI
ACCOMPLISHMENTS AND RECOMMENDATIONS
DECEMBER 1992**

**MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES
Cogswell Building
Helena, MT 59620**

M I A M I

***MONTANA'S INITIATIVE FOR THE ABATEMENT OF
MORTALITY IN INFANTS***

ACCOMPLISHMENTS AND RECOMMENDATIONS

December 1992

**Montana Perinatal Program
Family/Maternal & Child Health Bureau
MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES
Cogswell Building
Helena, MT 59620**



Digitized by the Internet Archive
in 2014

<http://archive.org/details/montanasinitiati1992mont>

CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Introduction	1
The MIAMI Concept	2
Low Birth Weight Prevention/Local MIAMI Projects	3
Medicaid Options for Pregnant Women	9
Infant Mortality Review	11
Public Education	13
Recommendations of the MIAMI Advisory Council	
Results of the 1990 recommendations	15
1992 Recommendations	19
References	21
APPENDICES	
A Location of Local MIAMI Projects	22
B MIAMI Project County Perinatal Statistics	23
C Intake and Outcome Data Report Summary	24
D Demographic Information on Fetal/Infant Mortality Review	25
E Baby Your Baby - At A Glance	27

INTRODUCTION

"In this century, the health care service most relied upon to assure positive pregnancy outcomes has been prenatal care. In general, women who receive prenatal care during the first trimester have better pregnancy outcomes than women who have little or no prenatal care... Prenatal care provides a foundation for improving the health of the pregnant woman, infant, and family ... the prenatal care system is a cornerstone of health care delivery in our society." from Caring for Our Future: The Content of Prenatal Care (1989)

During the mid to late 1900's, better sanitation, chlorinated water and successful battles against infectious diseases decreased the United States infant mortality rate dramatically. In the 1970's and 1980's, the infant mortality rate was further decreased by the successes of neonatal intensive care units. Technical advances have limits, however, and health providers and policy makers have had to carefully examine other factors which may be impacting pregnancy outcomes. According to the author of "Stork Reality: Why America's Infants Are Dying", there are four main barriers to further reducing the infant mortality rate. They are:

1. federal programs for prenatal care are fragmented and clogged with paperwork.
2. there are not enough public health clinics or private practitioners willing to serve low-income expectant mothers
3. about a sixth of all expectant mothers lack private health insurance and are ineligible for Medicaid, resulting in lack of basic, let alone specialized, health care
4. a health care system that has not effectively addressed the behavior and motivation of pregnant women.

MIAMI was created to address these barriers. And the strategy is working.

PERINATAL FACTS:

Low birth weight is the leading cause of death for infants under one year of age.

Babies born at low birth weight are 40 times more likely to die during the first month of life than normal weight infants.

Half of all deaths among infants in their first year of life are due to low birth weight.

Women who do not receive prenatal care are three times more likely to deliver a low birth weight baby who needs extended hospital care than those who do.

THE MIAMI CONCEPT

Montana's Initiative for the Abatement of Mortality in Infants (MIAMI) is a concept developed to address issues critical to the well being of pregnant women, women anticipating pregnancy, and children in Montana. The incidence of high fetal and infant mortality rates, low birth weight births, decreasing numbers of providers of obstetrical services and increasing numbers of adolescent pregnancies were among the factors which pointed to the need to organize statewide efforts to improve services for pregnant women.

The goals of the MIAMI Act as passed by the 1989 Montana Legislature are:

- ▶ to assure that mothers and children, in particular those with low income or with limited availability of health services, receive access to quality maternal and child health services;
- ▶ to reduce infant mortality and the number of low birth weight babies; and
- ▶ to prevent the incidence of children born with chronic illnesses, birth defects, or severe disabilities as a result of inadequate prenatal care.

MIAMI has four components which contribute to the overall plan to positively impact pregnancy and birth outcomes. They include **local projects** which provide direct services to high risk pregnant women, **Medicaid changes** to improve access to services, **infant mortality review**, and **public education** regarding the need for early and continuous prenatal care. MIAMI is overseen by the MIAMI Advisory Council, whose eight members are appointed by the Governor. The Council has the responsibility to consult with the Department of Health and Environmental Sciences "on matters pertaining to the MIAMI project and to make recommendations regarding maternal and child health services." (MCA 50-19-312)

MIAMI Advisory Council members in 1992-93 are:

- | | |
|--|---|
| ● Lil Anderson, R.N.
Billings | ● Nancy Colton
Bozeman |
| ● Marietta Cross, R.N.
Missoula | ● Dan Dennehy
Butte |
| ● Nancy Ellery
Helena | ● Jeffrey Hinz, M.D. (Chair)
Great Falls |
| ● Angela Russell A.C.S.W.
Lodge Grass | ● J. Dale Taliaferro
Helena |

This report outlines the activities related to the four components of the MIAMI project.

LOW BIRTH WEIGHT PREVENTION/LOCAL MIAMI PROJECTS

A major emphasis of the MIAMI project has been to support and coordinate the public health system in Montana to more effectively serve the perinatal population and address the issues in each community which impact the low birth weight and infant mortality rates. The low birth weight rate is the percentage of babies weighing less than 2500 grams or 5½ pounds at birth. The infant mortality rate is the number of babies out of every 1000 who die before their first birthday.

MIAMI project services include:

- public health nurse, social worker and dietician home and office visits intended to assist the woman in having a successful pregnancy,
- access services paying for transportation and initial physician costs when no other resource is available,
- client education which decreases the potential for low birth weight and other negative outcomes, and
- community education regarding the need for early and continuous prenatal care.

MIAMI projects (also known as low birth weight prevention projects) address many perinatal issues, most importantly the prevention of low birth weight births. The high U.S. infant mortality rate is brought about largely by low birth weight babies being born too soon or too small, and by increases in postneonatal death rates. During the postneonatal period, babies are especially vulnerable to damaging effects of poverty and inadequate health care. Each local MIAMI project works closely with other community services to maximize the abilities of its clients to have a successful pregnancy outcomes.

The local MIAMI projects have their own names and identities. A strength of the MIAMI project is that it supports local care providers and their unique community services. The names and location of the projects are:

<u>Project Name</u>	<u>City/County Name</u>
Better Babies Project	Billings/Yellowstone
Healthy Families - Jefferson	Boulder/Jefferson
Pregnancy Services	Bozeman/Gallatin
Labor of Love	Butte/Silver Bow
Healthy Pregnancy Project	Dillon/Beaverhead
Better Beginnings	Great Falls/Cascade
Access Links of Ravalli County	Hamilton/Ravalli
Healthy Pregnancy Services	Helena/Lewis and Clark
Flathead MIAMI Project	Kalispell/Flathead
Access Links	Missoula/Missoula

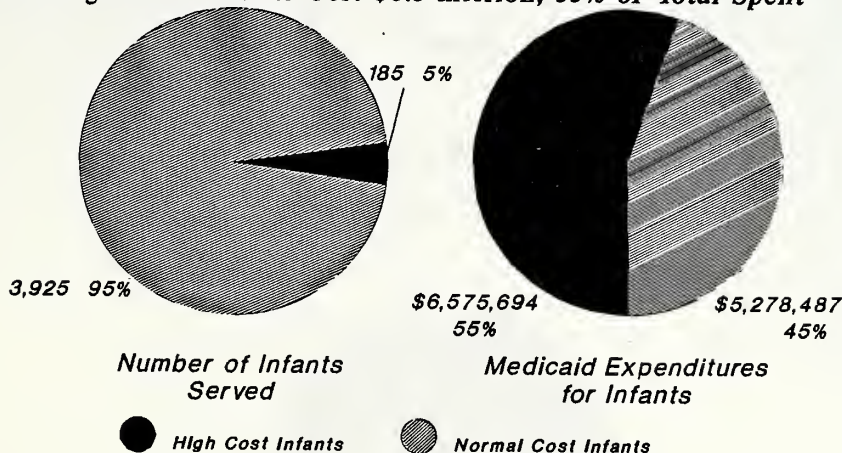
The map in Appendix A shows the location of the Local MIAMI projects.

Studies have shown that it is ultimately more expensive **not** to provide maternity care. Increased health care costs associated with LBW affect not only the family but also society. In 1990, in Montana, \$6.6 million or over half of the total Medicaid delivery budget of \$11.8 million was spent on only 5 percent of the births. (Figure 1)

Figure 1

Total Infants On Medicaid Calendar 1990

185 High Cost Infants Cost \$6.5 million, 55% of Total Spent



The majority of high cost births were low birth weight and could possibly have been prevented with regular prenatal care. The approximately \$144 per client in state administered funds seems a small price to pay when considering the \$610 - \$2000 per day neonatal intensive care costs for a high risk infant. The Office of Technology Assessment has studied the potential effectiveness of prenatal care for all pregnant women living in poverty. Its findings indicate that for every instance of low birth weight averted by prenatal care, the United State health care system saves between \$14,000 and \$30,000 in health care costs associated with this condition.

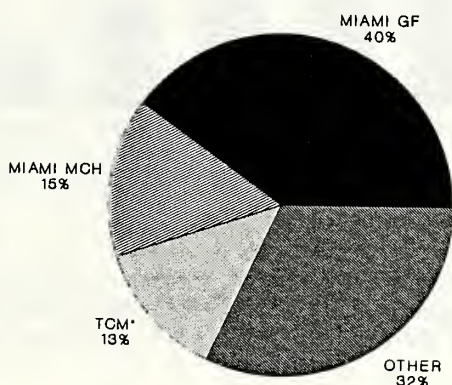
The ten local MIAMI projects provide care coordination services to high risk pregnant women, with priority given to those with low incomes. Care coordination services are described in our conceptual model, and include case management, education, counseling, transportation support, and other applicable services depending on individual needs. Clients are referred to the projects by Medicaid, WIC, Family Planning, abortion counseling programs, private physicians and clinics, word of mouth, and self referral. Contractual requirements are that projects attempt to provide services to approximately 20% of the pregnant women in their county; projects presently provide services to approximately that number. The ten local MIAMI projects are located in counties where approximately 65% of the state's births occur. MIAMI project county statistics are included in Appendix B.

Project Funding

1992 marked the first year that general fund money was earmarked for the MIAMI projects. Approximately 1600 women received services from the projects during that year. A total of \$230,750 for the projects was administered by the Montana Perinatal Program during FY '92. Sources of the state-administered funds includes approximately 2/3 from general funds and the remaining 1/3 from Federal Maternal and Child Health Block Grants. Counties support their projects with funds from county MCH Block grant funds, March of Dimes grants, direct community contributions, and Medicaid Targeted Case Management. (Figure 2)

Figure 2

MIAMI Project Costs Funding Sources



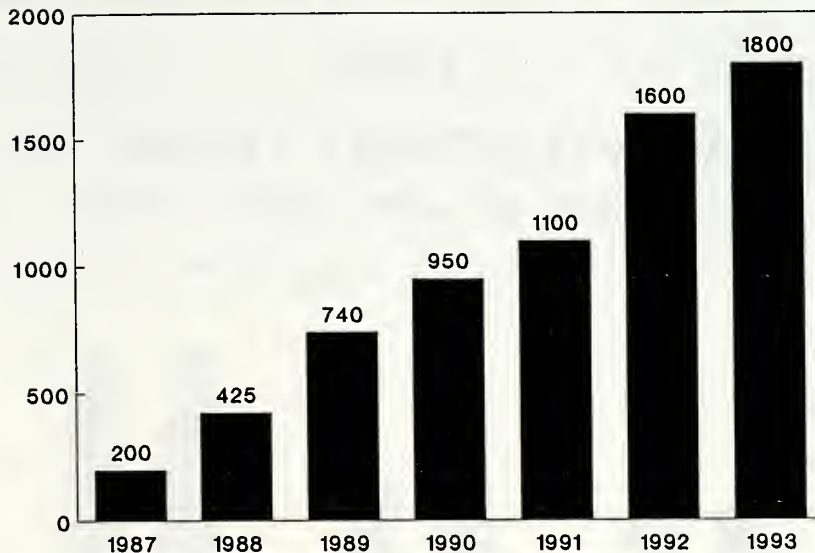
FY 1992

* Medicaid Targeted Case Management

Local MIAMI project services are in demand. In six years, the projects have grown from serving approximately 200 clients in FY 87, to the estimated 1800 to be served in FY 93. (Figure 3) During FY 91 the cost per client in state-administered funds was approximately \$141. The cost per client in state-administered funds in FY 92 was approximately \$144, so despite apparent increases in project funding, the state DHES administered per client funding remained virtually unchanged. Local MIAMI projects bill directly for Medicaid funds which pay for case management services for eligible clients.

Figure 3

MIAMI PROJECTS CLIENTS



NOTE: 1993 is a projected number

Project Effectiveness

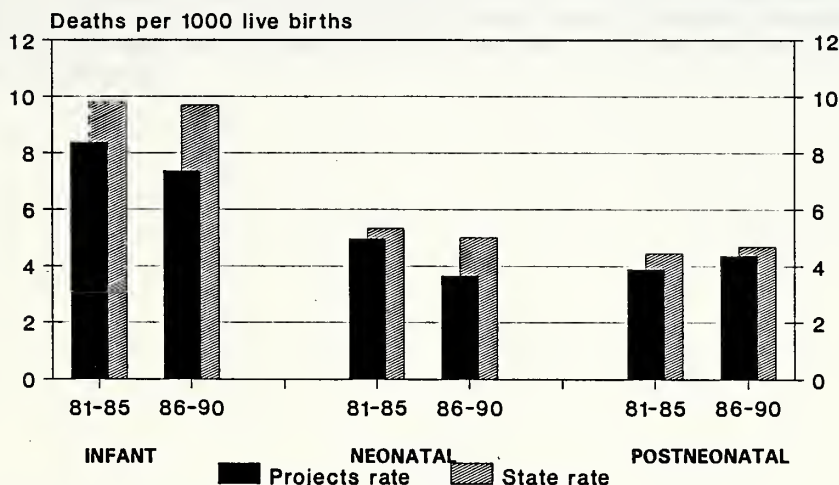
The important question is do the projects work? Do they decrease low birth weight rates, do they decrease infant mortality, and do they serve the truly high risk women who are at risk for not only poor pregnancy outcomes, but for poor parenting and other factors which impact future generations?

- **Low Birth Weight Rates** - In 1986, the low birth weight rates in the pilot project populations ranged from 5.8 to 12.9, with an average of 9.23. The low birth weight rate for the projects in FY 92 was 6.08. If MIAMI projects did not exist, and the low birth weight rate in 1600 clients remained at the 9% instead of the 6%, an additional 50 low birth weight babies would have been born in Montana. At an average cost of \$35,675 per child for acute care costs, this means that those 50 babies not born early saved a potential Medicaid expenditure of \$1,783,750. 28% of that cost is to the state. A conservative estimate therefore, is that **THE MIAMI PROJECTS SAVED THE STATE OF MONTANA A POTENTIAL \$499,450 DURING FY 92.** Considering the state administered MIAMI project cost of \$230,750, that is a substantial return on an investment.
- **Infant Mortality Rates** - There is evidence that the projects are also positively affecting the infant mortality rates in their counties. National standards use 5 year averages to reflect changes in infant mortality, especially in low population areas such as Montana. The first projects began in 1986, so for the first time in 1990, it was possible to look at the five year average before and after the projects inception, and compare the changes

against the state as a whole. In Figure 4, it is apparent that the counties with projects have decreased the overall and neonatal mortality rate at a much more rapid rate than the state as a whole. The postneonatal rate, however, which is more an indicator of infant follow up and parenting efforts, has not shown similar changes. This points to the need for increased efforts in services for infants and their parents.

Figure 4

MT INFANT MORTALITY RATES MIAMI project rates vs State rates



→ **Client Risk Factors** - Projects are focusing on, and serving a very high risk population. As of June 1992, 92% of the project clients were on Medicaid, and 56% of the clients were further delineated as high risk according to Medicaid case management criteria. A summary of the Intake and Outcome data collected on clients in FY 92 is in Appendix C. A few highlights from that summary are as follows:

- 25% of the women are at medical risk for preterm labor
- 16% experienced preterm labor during the last pregnancy
- 51% reported financial difficulties
- 35% smoked during the pregnancy
- 12% had difficulties with housing including homelessness
- 5% were being battered
- 8% had a sexually transmitted disease during the pregnancy
- 7% reported using alcohol

Project staff recognize that the incidence of substance abuse is likely severely under reported. Continuing education programs to the project staff during FY 1992 included information

regarding effective interviewing and available substance abuse services in Montana. MPP staff are collaborating with other agencies in the state to provide further education on that and other topics in 1993 and 1994. Project staff also support plans to conduct blinded studies which would more accurately identify the incidence of substance use in Montana's childbearing population.

Project staff have also identified an increasing problem with homelessness and/or substandard housing for low income pregnant women. The waiting lists for low income housing range from 3 months to 3 ½ years depending upon location in the state. The impact of inadequate living arrangements will ultimately increase the incidence of preterm deliveries, low birth weight infants and infant mortality.

A major effort by MIAMI project staff is education of their clients regarding the signs of preterm labor. A measure of success is that although 16% of their clients experienced preterm labor during their pregnancy, only 6% had low birth weight babies. Research has pointed out that acute care cost savings of \$10,000 to \$33,700 may be anticipated for every week that a pregnancy is prolonged.

MEDICAID OPTIONS FOR PREGNANT WOMEN

Lack of insurance or payment method is one of the reasons identified by clients for not accessing prenatal care. Medicaid has addressed that problem by making a number of changes which make Medicaid more accessible to pregnant women. Those changes have improved the access to obstetrical services in the state; DSRS estimates that Medicaid paid for almost 35% of deliveries in Montana in 1992.

In April of 1990, Medicaid eligibility was expanded for pregnant women and children up to age six with incomes up to 133% of the federal poverty level. This explains some of the increase of Medicaid coverage of deliveries. In addition, reimbursement rates for obstetricians and pediatricians was greatly increased, elevating the percent of reimbursement from approximately 40% of actual costs, to 85% of actual costs. Presumptive and continuous eligibility, and Targeted Case Management for high risk pregnant women became available during 1991, and are defined as follows:

Presumptive eligibility - is available at provider site, and grants immediate but temporary Medicaid coverage until a formal eligibility determination can be made

Continuous eligibility - allows for the mother to continue coverage throughout the pregnancy and the 60 day post-partum period, regardless of fluctuations in income. Infant's eligibility continues through the first year of life if the child remains in the mother's household and if the mother would be eligible for Medicaid if she were pregnant.

Targeted Case Management - is the process of planning and coordinating care to meet individual needs of the client in obtaining necessary medical, social, nutritional, education and other services.

Presumptive eligibility has been very effective in the state. 600 pregnant women were determined Medicaid eligible under this option in FY 1992. Only six percent of those applying for presumptive eligibility were subsequently denied.

Approximately 90% of MIAMI clients are Medicaid eligible. Medicaid clients are not automatically eligible for Targeted Case Management (TCM) services. A client may be determined TCM eligible based on the presence of one of the factors in Column A below, or the inability to obtain necessary resources and at least three of the factors in Column B:

Column A

age of 17 or younger
medical risk factors
abuses alcohol or other drugs
someone in immediate environment
 abuses drugs or alcohol
is homeless
is in an abusive relationship

Column B

lacks a support system
history of physical or sexual abuse
two or more children under age 5
not educated beyond twelfth grade
physical or mental impairment
no prenatal care prior to 20 weeks
refugee status
age 18 or 19 years
limited English language skills

As of July 1992, approximately 56% of MIAMI clients were eligible as Targeted Case Management clients.

There were other Medicaid changes over the last two years intended to facilitate client services. The size of the Medicaid application form was decreased from 36 to 14 pages. Medicaid also added outpatient chemical dependency treatment for persons up to age 21, and expanded children's services to include private duty nursing, rehabilitation, respiratory therapy, nutrition and chiropractic services.

Medicaid changes have been very effective in the state. Unfortunately, the number of "working poor" or uninsured in the state continues to rise. Over 141,000 individuals, approximately 18% of the population, in Montana are uninsured. 35% of those uninsured are children. Further efforts are necessary to assure that pregnant women and young children are able to access health care appropriately and without delay.

INFANT MORTALITY REVIEW

Infant mortality has an impact on the lives of all Montanans. Montana's 5 year average infant mortality rate of 9.7, and 5 year average Native American infant mortality of 16.5 continue to be far above the Year 2000 goals of 7 and 8.5, respectively. Montana's combined infant mortality rate has shown no appreciable improvement over the last 10 years; the 1981-1985 average was 9.8, while the 1986-1990 is 9.7. The Native American infant mortality rate in Montana has grown over that time period, from 12.5 for the 1981-1985 time period, to 16.5 for 1986-1990.

There is no reason to believe that Montana will suddenly experience a change that will allow it to reach the year 2000 goal. Therefore, it is imperative to examine the causes and plan accordingly. The MIAMI legislation in 1989 provided for that activity through infant mortality review (IMR). IMR is defined as "a process for examining factors which contribute to infant death through a systematic evaluation of individual cases in order to identify potential opportunities to improve maternal and child health" (William Sappenfield, M.D.).

In July, 1990, IMR which reflects Dr. Sappenfield's definition requiring individual case review began. The review began with 4 pilot project sites, and has now expanded to six MIAMI project sites. All MIAMI project sites, with the exception of the Butte/Silver Bow project which began in November of 1992, have received training on data collection and grief counseling. In addition, the Billings IHS became interested in the state review format, and has obtained federal clearance to adopt the state's format. In July of 1992, IHS brought personnel from 5 reservations to Billings for training which was conducted by DHES staff. IHS plans on beginning data collection using the state format in late 1992.

The Fetal/Infant Mortality Review is conducted in 6 month cycles. The medical abstracts and home interviews are received from the counties, linked with birth/death certificate files by professional staff, masked, and returned to the communities to allow for local reviews. Representatives of each of the communities participate in the state-wide reviews, which seek to identify state-wide or regional trends, and evidence for the need for public education and/or policy development.

The potential sample for participating counties included 82 fetal or infant deaths. Full reviews (home interview and medical abstract) were completed on 41 of those cases, with an additional 10 cases having only the medical abstract completed. The breakdown of the types of deaths in the sample are as follows:

<u>Number</u>	<u>Type</u>	<u>Definition</u>
43	Fetal deaths	birth of a fetus after 20 weeks gestation which shows no evidence of life after complete birth
19	Neonatal deaths	death of an infant age birth to 28 days
20	Postneonatal deaths	death of an infant age 28 days to one year

Demographic information from the IMR data set is included in Appendix D.

An additional 25 medical abstracts have been received for the fourth round, which is scheduled in December of 1992.

Implications

At the state-wide review several implications have been discussed. Due to the small sample size, and the lack of statewide involvement, implications must be considered as potential.

SIDS deaths	The lack of Sudden Infant Death Syndrome (SIDS) evaluation standards in the state make the determination of SIDS difficult, and may actually contribute to a number of SIDS being misdiagnosed. National standards point to the need for autopsy to indicate SIDS as the cause of death. SIDS protocols exist in other states. SIDS deaths ARE occurring, and in alarming proportion in some areas and populations. SIDS deaths are occurring in day care centers. This pointed out the need for education/information to day care providers regarding SIDS.
Ultrasound studies	Due to the lack of trained individuals to conduct studies and analyze the findings, there is some question about the effectiveness of ultrasound studies for determining potential birth defects. Recommendations point to the need for standardization of studies, and cooperation of facilities which conduct the studies.
Incidence of fetal death	The incidence of fetal deaths in the sample population is high. The state usually has about 42% of the perinatal deaths attributed to fetal deaths. In this sample, 52% were fetal deaths. The incidence of fetal deaths stimulated consideration about the impacts of environmental and genetic factors on fetal deaths in the population as a whole, not just the sample population.
Reporting problems	Some discrepancies between the death and birth certificate information were apparent, including the lack of evidence of congenital anomalies at birth, which impacted the demise. Also, discussion about the actual cause of death on the death certificate is frequently not linked to the underlying conditions. This may be affecting the reporting of conditions and their impacts in the state. Some reported causes, such as "cord accidents" are difficult to define, and questionably defensible in all cases.
Placental examination	Placental examination serves a critical role in understanding the factors influencing birth outcomes. As with ultrasound studies, the analysis is technically difficult, and requires special training. Lack of that training, and hence analysis, results in a deficit of information on which to plan treatment and/or prenatal counseling for subsequent pregnancies.
Mortality contributors	The impact of multiple moves, financial stress and other social stressors was identified.

PUBLIC EDUCATION

National studies show that the leading cause of death among infants less than one year of age is low birth weight. Medical experts agree that low birth weight and its complications can be largely prevented if the expectant mother receives prenatal care during her first trimester and at regular intervals thereafter until the birth of her child.

Nearly one quarter of all pregnant women in American fail to see a health care professional prior to their child's birth. Low income, non-white women and teen age girls are most likely to obtain inadequate prenatal care.

A key element of the MIAMI project is public education. The Baby Your Baby (BYB) campaign is designed to educate and motivate expectant mothers (and those who care about them, i.e., parents, relatives, friends) to enroll in a medical support program in the first 3 months of pregnancy.

Local MIAMI projects are required to educate the community, including health care providers about their services. A major educational component directed statewide is the Baby Your Baby multi-media campaign.

The objectives of the Baby Your Baby outreach campaign are:

- To increase the number of women seeking prenatal care during their first trimester.
- To reduce infant mortality and morbidity.
- To reduce the number of low birth weight babies.

"Baby Your Baby" is a community outreach and public awareness effort involving a multi-media approach to selected target audiences in both urban and rural areas. This multi-faceted media campaign is directed to high risk women, and secondarily to all women of child bearing age. Specific target groups for the campaign include teenagers, alcohol and/or drug addicted or affected women, Native American women and women from low socio-economic groups, including the homeless.

The statewide multi-media campaign includes:

- Establishment of a 1-800 information and referral line
- 104 weekly television news segments
- Four half hour documentaries
- Eleven television public service announcements
- Weekly radio news segments
- Eight page newspaper supplement
- Newspaper articles
- Information posters (2500 distributed to date)
- Client and provider brochures (10,000 distributed to date)
- 15 month calendars and information packets (1230 distributed)
- Establishment of contacts and community based referral system in 52 counties

As of November 6, 1992, 1230 women had called the 1-800-421-MOMS number. Calls have increased to approximately 150 per month. Over 50% of women calling the line request help finding a health care provider, paying for services, selecting healthy foods, and help with smoking cessation. These pregnant women are given the telephone number of their local contact, and the local contact is provided the written information regarding the woman needing help. Information on women requesting assistance is also sent to the nurse consultant at the State Perinatal Program.

The Baby Your Baby campaign is a successful public/private partnership. The campaign has rallied public and private agencies, the media, individuals and the general public around a common theme of healthy pregnancy. DHES contracted with Healthy Mothers, Healthy Babies - The Montana Coalition to develop and conduct the campaign. Sponsors of the program include:

- Blue Cross/Blue Shield of Montana
- Montana Department of Health and Environmental Sciences
- Montana Department of Social and Rehabilitation Services
- Healthy Mothers Healthy Babies -- The Montana Coalition
- The Doctors' Company
- Montana Big Sky Chapter March of Dimes
- Medical Genetics Program of Shodair Hospital
- Children's Trust Fund
- Montana Area Health Education Center (AHEC)
- Montana Department of Family Services
- Kiwanis of Helena
- MPCO/ENTECH Foundation, Inc.
- American College of Obstetricians and Gynecologists (ACOG)
- St. Vincent Hospital and Health Center, Billings
- Bozeman Deaconess, Bozeman
- St. Peter's Community Hospital, Helena
- Shodair Children's Hospital, Helena
- Glendive Medical Center, Glendive
- Community Medical Center, Missoula
- Montana Deaconess Medical Center, Great Falls

HmHb sought and received outside contributions of \$83,000 from Community Hospitals, and \$39,000 in private funding. Medicaid provided the \$236,000 federal match for the donations. The total cost of the multi-media Baby Your Baby campaign was \$430,000, a fraction of the two million dollars Utah spent on their similar campaign. Healthy Mothers, Healthy Babies is presently pursuing funding which would allow for continuation and expansion of the campaign to include children through two years.

Baby Your Baby... At a Glance is included in Appendix E.

RESULTS OF THE 1990 RECOMMENDATIONS OF THE M I A M I ADVISORY COUNCIL

1. Extend the sunset on MIAMI legislation to June 30, 1993.

The sunset was removed from the legislation.

2. Create a state center for health statistics which will facilitate the retrieval of information needed to guide health provision and planning.

An 18 month Robert Wood Johnson planning grant for a state center for health information was obtained by DHES. Project staff and an advisory council are in place. The project staff are developing a three year implementation grant for submission at the end of the planning grant period.

3. Develop a rural health planning commission, which will provide support and consultation to rural health practitioners, as well as guide state planning for rural health provision.

Health Care for Montanans has addressed some of the issues surrounding rural health needs, and is proposing a health care commission which would encompass the rural health issues.

4. Encourage policy changes which will improve health care of infants and pregnant women through tort reform.

Health Care for Montanans has developed a package of tort reforms to be proposed during the 1993 legislative session.

5. Support the Montana Medical Genetics Program.

DHES continues its collegial relationship with the Montana Medical Genetics Program (MMGP), and administers the contract with MMGP. Taxes on health insurance policies support the work of the program in identifying genetic abnormalities and environmental impacts on childrens health, including Fetal Alcohol Syndrome/Fetal Alcohol Effect (FAS/FAE). Fees, donations and grants further fund the MMGP.

6. Support the public vaccine program so that no child will be denied vaccine, and potentially pass preventable illnesses on to women and/or their fetuses.

MCH Block Grant funds were earmarked for vaccine purchase. A federal grant was obtained to support direct care services. A statutory mandate for well child care passed in 1991 includes vaccines for children up to age two who are covered by health insurance.

7. Facilitate the creation of a central registry and tracking system for infants who have a high risk of experiencing developmental delay.

Children's Special Health Services Program (formerly Handicapped Childrens Services) has taken the lead role in the Fam/MCH Bureau of developing the FOLLOW ME

program. Follow Me is a tracking system intended to assist in identifying and following children at risk for developmental delay. Pilot projects are anticipated for FY 93. Follow Me emphasizes the role of public health in providing services to at risk children. The creation of Follow Me is consistent with Part H mandate to track high risk children.

LOW BIRTH WEIGHT PREVENTION

8. Accommodate increased client loads by additional funding to the existing seven (7) low birth weight prevention projects.

Project growth has continued to spiral upward. Existing seven projects received a total increase of \$65,000 between FY 1991 and FY 1992. The client load of those seven projects increased from 1078 in FY 1991, to 1515 in FY 1992. The net increase per client was therefore only about \$2.50, from \$141.01 per client to \$143.68 per client. Targeted Case Management did increase the funds available to the projects for services to eligible clients.

9. Contingent on adequate funding of existing projects, fund an additional nine (9) low birth weight prevention project sites.

Two additional projects and one satellite were created with available funds during the 92/93 biennium.

10. Facilitate the role of mid-level health care providers in Montana.

Montana Perinatal Program and Family/Maternal Child Health Bureau staff continue to promote the role of certified nurse midwives and nurse practitioners in the state. Several MIAMI projects utilize nurse practitioners to conduct assessments on clients, as part of their total service package. The new Medicaid Passport program encourages mid-level practitioners by enrolling them as potential Passport providers.

11. Collaborate with Indian Health Services, tribal health and urban Indian centers to improve coordination of services to Native Americans.

Legislation in 1991 added an American Indian member to the MIAMI Advisory Council. The nurse consultant in the Montana Perinatal Program functions as the liaison for minority health issues for the Fam/MCH Bureau. The MPP Nurse consultant also serves on the Healthy Mothers, Health Babies "Cherish Our Indian Children" (Kellogg) project task force. Indian Health Services has received training on Infant Mortality Review home interviewing, and plans on beginning data collection using the state's format in September of 1992. Local project staff received training from tribal representatives on cultural impacts of perinatal care at a November 1991 meeting. Local MIAMI projects work closely with urban Indian centers to promote healthy pregnancies in the urban Indian population.

12. Facilitate home visits for all high risk and/or first time mothers.

MIAMI projects have begun to conduct at least one postpartum assessment on each client. Some projects with infant follow up programs have coordinated those visits

with infant follow up staff, to allow for continuity of care, and effective exchange of information. A grant request from DHES to DHHS in summer of 1992 for funding of a home visits for infants program was not funded. New programs will be built on existing public health systems, and will collaborate with Montana Council for Families child abuse prevention projects as appropriate.

13. Increase referrals of Low Birth Weight Prevention Project clients to local family planning clinics and other applicable services.

Local MIAMI projects refer clients to Native American centers, family planning, substance abuse, WIC, social service and family service programs. One project reports that each client receives an average of four referrals to other services.

INFANT MORTALITY REVIEW

14. Expand infant mortality review to additional sites, including more locations where Native American populations may be accessed.

All 9 projects (including satellite project) received training in Infant Mortality Review data collection and grief support in August of 1991. Indian Health Service staff received training in IMR in June of 1992. Researchers at the Center for Population Research continue to work with DHES on the analysis of a matched birth/death linked file of certificates, and assist the state in identifying policy and program focus areas.

15. Fund expansion of the review process to include low birth weight births, to allow examination of causes of infant morbidity.

No additional funding was provided for infant morbidity review.

MEDICAID CHANGES FOR PREGNANT WOMEN

16. Expand Medicaid eligibility coverage for pregnant women and children up to age six to 185 percent of the federal poverty level.

Medicaid eligibility for pregnant women and children up to age six was increased from 100% to 133% of the federal poverty level.

17. Increase reimbursement for prenatal and delivery services to 90% of actual fee.

Reimbursement rates increased from approximately \$750 per prenatal care and uncomplicated delivery to approximately \$1170 per case. Average statewide charges are \$1368, so Medicaid reimburses approximately 85% of total charges.

18. Implement a targeted case management system for high risk pregnant women.

Targeted case management for high risk pregnant women and their infants became available for Montanans in July 1991.

19. Maintain presumptive and continuous eligibility as a Medicaid priority.

Presumptive and continuous eligibility became available for pregnant women in Montana on January 1, 1991. SRS plans on continuing presumptive and continuous eligibility for Medicaid eligible pregnant women.

20. Support low cost health insurance packages which include maternity and well-child services.

A bill was passed to implement basic health insurance for small businesses and to individuals. The basic health plan includes coverage for maternity and well child care.

PUBLIC EDUCATION

21. Promote public education of perinatal issues through the media, especially in the form of the Baby Your Baby campaign.

The Baby Your Baby campaign is nearing the end of its second year of operation. The project has successfully educated the public, and linked women with appropriate services. A second phase of Baby Your Baby which will add information appropriate for parents of children age zero to two is presently being considered.

MIAMI Advisory Council Recommendations 1992

1. Develop regionalized MCH services to effectively use limited resources.
2. Work collaboratively with other agencies to address rural health issues.
3. Utilize services within the state of Montana whenever possible, and work with Medicaid and other state agencies to educate health care providers about availability of services.
4. Support funding which would provide for a repeat or second rubella vaccine and for Hepatitis B immunizations for children.
5. Support programs which encourage timely immunization of children.
6. Facilitate the early identification and tracking of and service delivery for "at risk" children and families by public health professionals and paraprofessionals through the development of the Follow Me project.
7. Examine the cultural impacts on the attitudes and utilization of prenatal care services in Montana's ethnic groups, in order to respond effectively and appropriately to client needs.

LOCAL MIAMI/LOW BIRTH WEIGHT PREVENTION PROJECTS

8. Based on maintaining the present funding level of existing projects, support funding increases which would allow for an additional four (4) regional MIAMI projects, especially targeting Eastern Montana.
9. Increase funding to existing MIAMI projects to improve services to high risk children up to age one year.
10. Work collaboratively with other agencies to increase the number of substance abuse programs which are able to effectively serve pregnant and parenting women and their families.
11. Work collaboratively with other agencies to increase availability of housing for pregnant and parenting women and their families.
12. Collaborate with state and local Family Planning programs to decrease the incidence of teen pregnancy in Montana.

INFANT MORTALITY REVIEW

13. Fund fetal and infant mortality review in the state.

MEDICAID CHANGES

14. Expand Medicaid eligibility coverage for pregnant women up to 185% and for children up to age 18 to 100% of the federal poverty level.
15. Expand Targeted Case Management services to at risk children up to age six.

PUBLIC EDUCATION

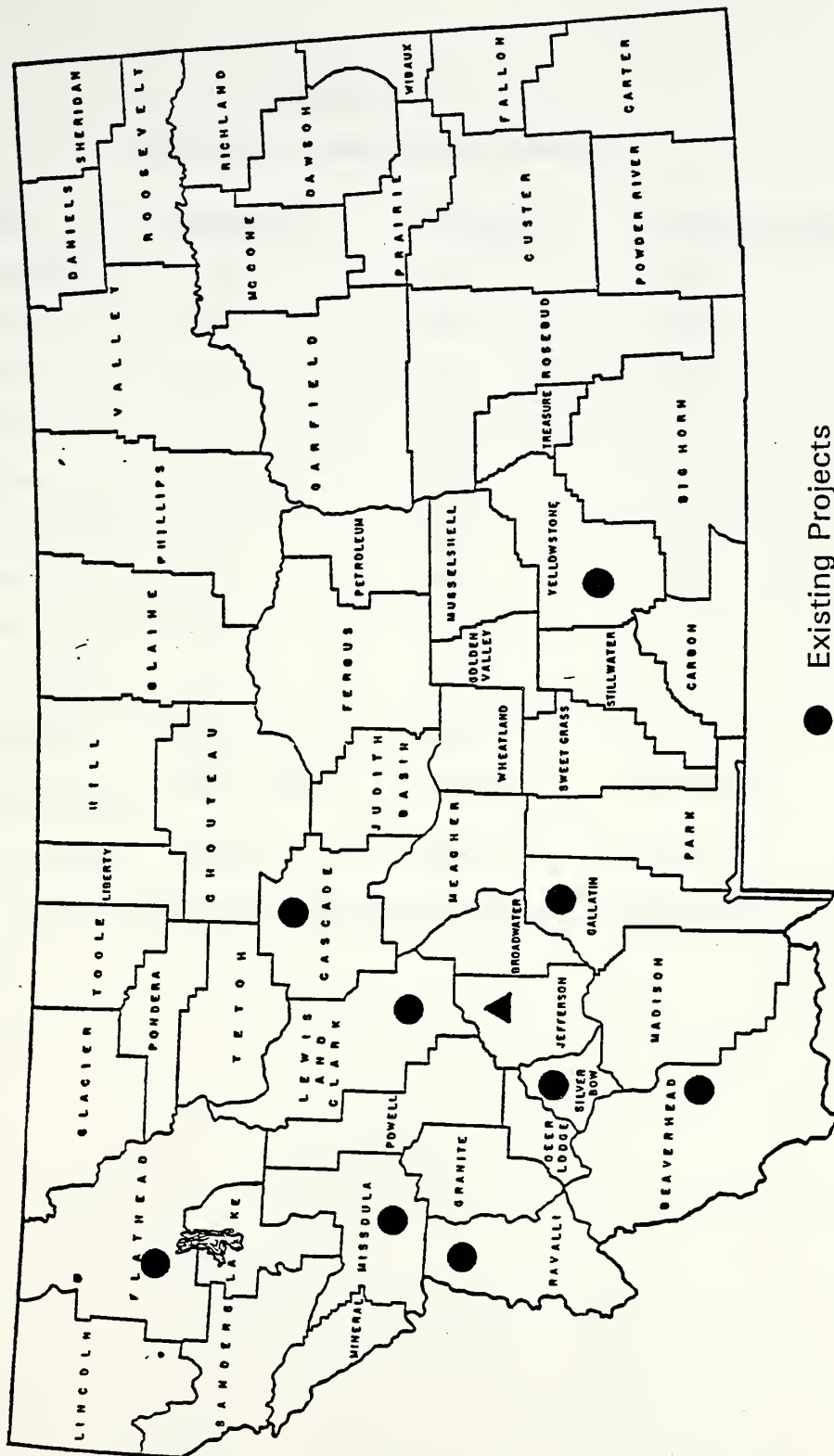
16. Continue the education of pregnant women and those who care about them through the Baby Your Baby Program.
17. Encourage education of health and education professionals regarding FAS/FAE management, in conjunction with the Montana Medical Genetics Program and others.
18. Collaborate with the Office of Public Instruction to ensure educators are aware of state and local services, including local MIAMI projects, which provide services to pregnant teens.
19. Facilitate and promote parenting classes as a means of breaking the cycle of abuse to children.

REFERENCES

- American Nurse's Association Nursing's Agenda for Health Care Reform 1991.
- Institute of Medicine Preventing Low Birthweight: Summary National Academy Press, Washington D.C., 1985.
- McClanahan, Patsy "Improving Access to and Use of Prenatal Care" JOGNN Vol. 21, No. 4. July/August 1992, pp. 280-283.
- National Center for Health Statistics Monthly Vital Statistics Report Vol. 38, No. 13, August 30, 1990.
- National Commission to Prevent Infant Mortality Troubling Trends Persist: Shortchanging America's Next Generation March, 1992.
- Office for Substance Abuse Prevention Alcohol, Tobacco, and Other Drugs May Harm the Unborn DHHS Publication No. (ADM)901711, 1990.
- Office of Technology Assessment Healthy Children, Investing in the Future Washington, D.C. February, 1988.
- Public Health Service, DHHS. Caring for Our Future: The Content of Prenatal Care. Washington, D.C., 1989.
- Schwartz, R.M. "What Price Prematurity" Family Planning Perspectives 1989, 21 (4) 170-174.
- Singh, Harmeet K. "Stork Reality: Why America's Infants Are Dying" Policy Review Spring, 1990, p. 56-63.
- Singh, Susheela et al. Prenatal Care in the United States: A State and County Inventory Vol 1, The Alan Guttmacher Institute, 1989.
- Southern Regional Project on Infant Mortality Building Blocks: Infant Mortality Prevention Strategies 1992.
- Southern Regional Project on Infant Mortality Common Ground: Medical Liability and Access to Obstetrical Care 1992.
- Trost, C. "Corporate Prenatal Care Plans Multiply Benefiting Both Mothers and Employers" The Wall Street Journal, June 24, 1988, p. 32.
- U.S. General Accounting Office Access to Health Care: States Respond to Growing Crisis. June, 1992.
- U.S. General Accounting Office Prenatal Care: Medicaid Recipients and Uninsured Women Obtain Insufficient Care September, 1987.

LOCATION OF LOCAL MIAMI PROJECTS

OCTOBER 1992



● Existing Projects

▲ Existing Satellite Projects

No. 1050 — County Outline Map
STATE PUBLISHING COMPANY
Helena



MIAMI (MONTANA'S INITIATIVE FOR THE ABATEMENT OF MORTALITY IN INFANTS)

APPENDIX B

MIAMI Project County Perinatal Statistics

<u>County</u>	<u>Pregnancies</u>	<u>Live Births</u>	<u>Number of Infants</u>
Beaverhead	158	131	103
Cascade	1,607	1,352	1,150
Flathead	1,027	817	706
Gallatin	864	658	644
Jefferson	130	105	96
Lewis & Clark	817	663	578
Missoula	1,544	1,095	980
Ravalli	373	312	285
Silver Bow	583	461	416
Yellowstone	2,134	1,687	1,410
Total for Project Counties	9,237 (65%)	7,281 (63%)	6,368 (63%)
State of Montana	14,250	11,602	10,194

NOTE: Based on 1990 Montana Vital Statistics Tables, and 1990 Census Data

APPENDIX C

HIGHLIGHTS FROM THE JULY 1991 - JUNE 1992 MIAMI PROJECT INTAKE/OUTCOME DATA REPORT N (total number of reports submitted) = 1,278

Demographics

	Range	Mean	Mode
Client Age	11 to 47 years	23.1	20
Gestational age at 1st visit*		13.28	10
Gestational Age at delivery		39	
Infant Days in NICU**		15	

*variable between first physician and project visit

**65 babies had NICU stays

Client Race

86% of clients were White. 9% were American Indian. The remaining 4% were made up of Black, Asian and other.

Preterm labor

13% of clients had a history of preterm labor. 16% experienced preterm labor during this pregnancy. 4% of project clients experienced preterm labor in both this and previous pregnancies.

Medical Risk for preterm labor (positive Creasy's)

25% of clients were at medical risk for preterm labor, according to the Creasy tool.

Educational level of clients

65% of clients had a high school education, GED and/or some college. 24% had a 10th or 11th grade education. The remaining 11 percent had a 9th grade or lower education. These numbers do include students still enrolled in school.

Risk Factors

5%	Presently in battering relationship
13%	History of battering relationship
51%	Financial Difficulties
4%	Homeless
8%	Multiple Residences
2%	Eating Disorder
35%	Smoke tobacco
7%	Use alcohol
2%	Use other substances
8%	Had an STD during the pregnancy
16%	"other"

Delivery method

80%	Vaginal delivery
2%	Vaginal birth after C-section
18%	Primary or repeat C-section

Birth Weights 1,019 births reported. 12 of those births were multiple births (twins). Ranged from 620 to 4990 grams. Mean 3260 grams (7lbs 3oz)

93.92%	> 2500
5.10%	1500 to 2499 (LBW)
0.98%	< 1500 (VLBW)
6.08%	MIAMI projects LBW rate July 1991 - June 1992
6.1%	Montana state LBW rate for 1990

Service Usage/eligibility

92%	Medicaid
44%	AFDC
95%	WIC
56%	TCM

APPENDIX D

DEMOGRAPHIC INFORMATION ON FETAL/INFANT MORTALITY REVIEW

N = 51

Average age of mothers	26 yrs.
Average age of fathers	29 yrs.
Mother of baby married	72%
Mother of baby never married	26%
Mother of baby divorced	3%
"Wanted or planned" pregnancies	46%
Mother living with husband	69%
Mother living with family/relatives	15%
Mother living with boyfriend	10%
Mother living alone	5%

Fetal/infant death occurred during or as a result of the mother's:

first pregnancy	43%
second pregnancy	35%
subsequent pregnancy	22%

Estimated household income in year prior to death:

< \$10,000 per year	17%
\$10,000 - 20,000	29%
\$20,000 - 30,000	12%
> \$30,000	42%

All clients reported they had prenatal care. The trimester prenatal care was initiated is as follows:

1st trimester (1-3 months)	91%
2nd trimester (4-6 months)	7%
3rd trimester (7-9 months)	2%

Number of prenatal visits:

≤ 6 visits	35%
7-11 visits	25%
≥ 12 visits	40%

Distance traveled for prenatal checkups:

0-20 miles	78%
21-40 miles	15%
41-60 miles	2%
100 + miles	5%

Exposure to tobacco (passive smoke)

no exposure	53%
1-5 hours per day	16%
5-10 hours per day	11%
10+ hours per day	20%

Drug/Substance Use during pregnancy

Tylenol	63%
Aspirin	12%
Antacids	29%
Alcohol	29%
Tobacco product	29%
Sedative	2%
Caffeine	61%
Marijuana	2%

Reported problems with accessing health care

No health insurance	5%
Didn't have medicaid card	2%
"People in welfare office not nice"	20%
Displeased with care received	2%

Reported Stressors

Separated from partner	25%
Divorced	10%
Lost home or had to move	25%
Reported physical abuse	2%
Verbally/emotionally abused	15%
Severe financial problems	20%
Drug/alcohol use in immediate environment	27%



BABY YOUR BABY AT A GLANCE

BABY YOUR BABY....Much More Than A Multimedia Campaign!

On behalf of Healthy Mothers, Healthy Babies, the Montana Coalition, the Department of Health and Environmental Sciences, the Department of Social and Rehabilitative Services, and Blue Cross, Blue Shield Of Montana, here is BABY YOUR BABY AT A GLANCE.

BABY YOUR BABY is one "leg" of the MIAMI Project designed to reduce the incidence of low birth weight and infant death and sickness in Montana.

BABY YOUR BABY is multidimensional and works on multiple levels, and has truly been a public/private partnership.

IMPACT

Pregnant Women...as of November 6, 1992, 1,230 pregnant women have called 1-800-421-MOMS and registered for the BABY YOUR BABY Program. Calls have increased to approximately 125 month. Each woman receives a packet containing information vital to her pregnancy and a 15 month calendar for use during her pregnancy and the first 6 months of her baby's life.

Based on information provided by the 825 pregnant women who have registered with BABY YOUR BABY through June 30, 1992 the following statistics have been compiled:

- ☐ 16% are less than 19 years of age
- ☐ 8% are more than 33 years of age
- ☐ 25% had not had a pregnancy checkup
- ☐ 13% made the first pregnancy checkup after the first trimester
- ☐ 52% (433) needed assistance
 - ☒ 54% needed help paying for prenatal care and delivery
 - ☒ 44% needed help selecting healthy foods
 - ☒ 41% needed help paying for healthy foods
 - ☒ 30% needed help finding a physician or care provider
 - ☒ 26% needed help with smoking cessation

A follow up survey, along with an opportunity to receive a free Healthy Mothers Healthy Babies Commemorative Birth Certificate, is sent to each woman who registered when she has delivered. Sixty two percent (323) have returned the survey with the following results:

- ☐ 100% had received some prenatal care
 - ☒ 87% had received prenatal care within the first trimester
 - ☒ 56% had more than 12 prenatal visits
 - ☒ 26% had 9 to 11 prenatal visits
 - ☒ 14% had less than 9 prenatal visits
 - ☒ 60% were delivered by OB/GYN
 - ☒ 25% delivered by private physician
 - ☒ 15% delivered by other
- ☐ In the follow-up survey women were asked if they had comments-here is what they are saying:
 - ☒ I was at risk and didn't know it
 - ☒ I needed help paying bills and getting food for the baby
 - ☒ Program was very educational
 - ☒ WIC office was very helpful during my pregnancy
 - ☒ I was denied coverage by two counties
 - ☒ My Mother kicked me in the stomach
 - ☒ Really appreciate the help and support of two workers who came

- ☒ I had problems with transportation
- ☒ I was treated with utmost respect when using medicaid
- ☒ Applying for medicaid was a most upsetting experience
- ☒ The calendar was wonderful
- ☒ I know now I should have waited longer after my first child
- ☒ I want people to start getting care right away
- ☒ Stress reduction helped
- ☒ Breast feeding information helpful
- ☒ Helpful to have someone to go with me to my medical and WIC appointments
- ☒ You know I learnt from you even if I thought I knew
- ☒ Knowing someone cared and could contact if needed
- ☒ I was going to have my baby at home, I'm glad my husband objected

☒ The women also indicated some of their needs:

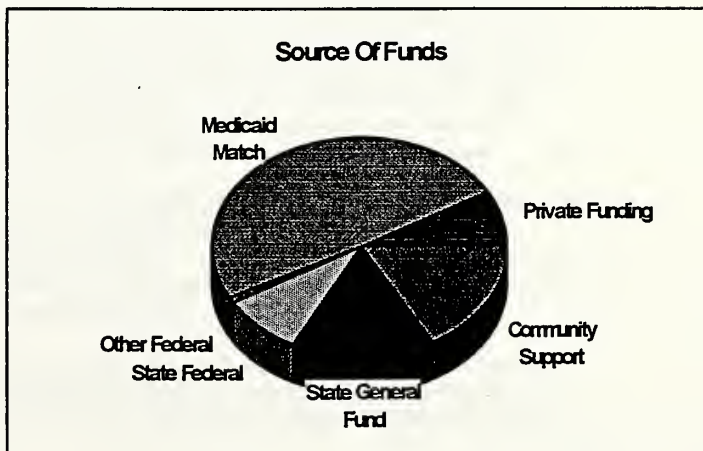
- | | |
|---|---|
| ☒ Could use more information to stop smoking | ☒ Counseling for single moms |
| ☒ Add information on LeLeche League | ☒ Information on bonding |
| ☒ More information on late teen pregnancy 18-19 | ☒ Information on toxemia |
| ☒ Need help line for pregnant women | ☒ Classes on preterm labor |
| ☒ Need emotional help for Hi-Risk pregnancy | ☒ More information on complications |
| ☒ More information on C-Section and postpartum | ☒ Support group to not drink or smoke |
| ☒ Has to be something that helps nausea | ☒ Let people know poverty level |
| ☒ Importance of leaking water | |

SYSTEMS CHANGE

Multiple Level-Multiple Dimensional Focus On A Healthy Pregnancy

The BABY YOUR BABY campaign has forged and strengthened some unique partnerships and has focused tremendous creativity, energy and attention on the importance of a healthy pregnancy. The Program has:

- ☒ established an 1-800 informational and referral line
- ☒ established a person in each community for pregnant women to contact for assistance
- ☒ assisted public health nurses, Miami Projects and others by referring identified high-risk pregnant women
- ☒ established a back-up referral system with the Montana Perinatal Program for identified high-risk pregnant women.
- ☒ provided a direct mail campaign of critical pregnancy information to target group
- ☒ Pregnant women and a healthy pregnancy are recognized as important focus of state government including the Governor, Legislature, and state agencies including DHES, SRS, DFS, Office On Aging
- ☒ expedited access to Medicaid
- ☒ increased provider awareness and support
- ☒ community efforts on behalf of pregnant women have increased
- ☒ established collaborative funding
- ☒ brought to Montana \$236,000 in new federal medicaid dollars
- ☒ received contributions from Community Hospitals of more than \$83,000 to help promote early and continuous prenatal care
- ☒ received more than \$39,000 in private funding



Most importantly, over 50% of women registering for the BABY YOUR BABY Program have needed assistance and have been referred to a local person for help in having a healthy pregnancy. The program has identified and featured in the media campaign women who most likely would have had a poor pregnancy outcome and the resultant high cost but through their involvement with the BABY YOUR BABY Program had a healthy outcome.

Due to lack of adequate resources, shortage of public health nurses, continued difficulty accessing physicians, and women who lack knowledge of the importance of prenatal care, pregnant women still are at risk of having a poor pregnancy outcome.

As the legislature and community has recognized and supported this by expanding Miami Projects and increasing medicaid reimbursement to providers, it is more important than ever to increase the awareness of the importance of early and continuous prenatal care.

There is unanimous support for BABY YOUR BABY Phase II - Pregnancy To Age Two.

BABY YOUR BABY PHASE II

BABY YOUR BABY has been a two-year, multi-media campaign designed to communicate with expectant mothers and motivate them to seek early prenatal care. Phase II of BABY YOUR BABY is designed to expand that education to include children under the age of two.

The priority objectives of this statewide outreach campaign are to:

1. Reduce the number of low birth weight babies
2. Reduce infant mortality and morbidity
3. Increase the number of women seeking prenatal care during their first trimester
4. Increase the number of women receiving continuous prenatal care
5. Increase the number of women breast feeding
6. Ensure that children, especially those who are disabled or at risk receive early and regular preventive health care
7. Inform Medicaid eligible parents about Kids Count Well-child screening examinations, follow-up, and treatment
8. Inform Medicaid providers and recipients about the Passport To Health Program
9. Inform all Montana parents about the need for early medical check-ups for their children including eye, hearing, dental and immunizations
10. Inform the public about emergency medical services and injury prevention for children
11. Encourage participation in early reading programs

Media Public Education Campaign Summary

The primary objective of BABY YOUR BABY PHASE II is to communicate with pregnant women in Montana in order to motivate them to seek early and repeated prenatal medical care and, with parents of children under the age of two, to motivate them to make sure their child receives early and regular preventive health care. Phase II is designed to reduce maternal and infant deaths and sickness and ensure that children who are disabled or at risk are identified and receive care, particularly in those target audiences that do not seek traditional avenues to medical care.

The campaign is a two-year continuation of the BABY YOUR BABY community outreach and public awareness effort that started in 1991. It involves a multi-media approach to selected target audiences in both urban and rural venues. This multi-faceted media campaign is directed primarily to high-risk women and, secondarily, to all women of child-bearing age. The new component will additionally target parents of children under two years of age.

The campaign is designed to educate and motivate expectant mothers (and those who influence them, i.e. spouse/partners, parents, relatives, friends) to become involved in a medical support program at the onset of pregnancy, not later than the first trimester. Parents of children under two

years of age, and those who influence them, will be encouraged to get their children into a well-child health program and to enhance their parenting skills.

The Campaign

BABY YOUR BABY PHASE II is a two-year multi-media campaign comprised of four six-month "waves." Each wave will carry forward the main theme of the campaign yet focus on specific sub-themes. These themes will include:

- prenatal care
- neo-natal care
- well-child care
- breast feeding
- immunizations
- Family Teaching Centers
- child safety and accident prevention
- parenting
- home visits
- support for parents, siblings, grandparents
- working parents
- dental care for mothers and children
- school readiness and early reading
- day care
- foster care
- extended family
- adoption
- fathers' role
- child support
- developmental stages
- exercise for pregnant women and new mothers
- infant and child exercise

The campaign will be carried out through various media including broadcast television and radio, print advertising, outdoor posters, print support materials, exhibits and special events.

Most importantly, the tone of the campaign will be positive, offering support and encouragement to expectant mothers and families of children newborn to two. It will emphasize the need for the mother's extended family and the community to nurture and assist her in having the best pregnancy possible and develop the necessary parenting skills to enhance the health and well being of Montana's children.

UNDERWRITING PROGRAM

The BABY YOUR BABY campaign has been and will continue to be a true public/private partnership. The cost of the campaign will be underwritten by sponsors from both the public and private sector.

Each major sponsor will receive credit on all media components. This will include, but will not be limited to television, radio, newspaper ads, bus boards, seminars, information cards, campaign banners, posters, pamphlets, viewer guides and TV program ads.

The campaign will provide underwriting partners with two years of high visibility in the community. In addition, they will be able to reach mothers-to-be and families of children newborn to two with their own materials through a direct mail packet which will be part of the campaign.

A major advantage to a corporation of joining in this campaign is their ability to reach its target publics at a very low cost.

October, 1992



DEPARTMENT OF HEALTH AND
ENVIRONMENTAL SCIENCES